

PUPIL TRANSPORTATION FINANCE FORMULA

Total state aid for to-and-from school transportation is the sum of Schedules A and B. Schedule A is comprised of (1) an allowance for mileage, (2) an allowance for time, and (3) an allowance for equipment (school buses) and administration (front office salaries and benefits). Schedule B is comprised of miscellaneous pupil transportation expenses that are not "formula" driven.

A. Schedule A: Under the provisions of Section 53-7-18.1 of the Utah Code, school districts are apportioned state transportation funds for transporting eligible pupils "to and from school." "Schedule A" of the pupil transportation budget is based on transporting students from home to school and from school to home once each day, required dead miles, after school routes, approved disabled pupil routes, vocational routes, the capital cost of buses, and the salaries of office administrators. Schedule A is that portion of a school district's pupil transportation funding derived by formula. Each year, prior to applying the formula to school district time and mileage data to determine funding, four ALLOWANCE RATES must be calculated. These four ALLOWANCE RATES are the independent variables used in the formula. They are the Time Allowance Rate, the Mileage Allowance Rate, the Depreciation Allowance Rate, and the Administration Allowance Rate.

1. The Time Allowance is paid at a rate that reflects the STATE AVERAGE COST PER MINUTE for driver salaries, retirement, Social Security, and health and accident insurance as reported on the F-4 financial report.

2. The Mileage Allowance is paid at a rate that reflects the STATE AVERAGE COST PER MILE for bus fuel, lubrication, tires/tubes, and repair parts as reported on the F-4 financial report.

3. The Depreciation Allowance is paid at a rate that amortizes the current state contract price of a standard equipped 84 passenger bus over the expected life (200,000 miles) of the bus.

4. The Administration Allowance is intended to provide funds for the salaries and benefits of district transportation administrators. The calculation for administrative allowance consists of three parts: An allowance for pupils transported, an allowance for route minutes, and an allowance for route miles.

B. Sample Formula Calculation Exercise:

Step One: Routes are separated into two groups. Routes in the first group are called "Type A" routes. These routes are similar in time and distance for the morning and afternoon runs, so these are routes for which the one-way mileage and time data can be "doubled" to arrive at **total** route time and mileage. The second group consists of routes that have morning and afternoon runs that are significantly different in time and mileage. They are called "Type B" routes. Because the a.m. and p.m. runs are significantly different for Type B routes, the one-way data cannot simply be "doubled" to arrive at **total** time and mileage. Instead, the a.m. run and p.m. run for Type B routes will be calculated separately, as though they are individual routes.

Step Two: Street maps are prepared for each to-and-from bus route to include labeling of streets and locations of schools. Not all streets need to be labeled, only enough to clearly orient the user of the map. Maps will clearly identify beginning and ending points of routes, all bus stops along the routes, the number of students picked up or dropped off at each stop, and portions of each route traveled in deadhead status. Prepare one map for "Type A" routes. Prepare an a.m. map and a p.m. map for all "Type B" routes. [Note: Kindergarten routes are one-way only and are therefore "Type B" routes.]

Step Three: The daily one-way time in minutes and the daily one-way distance in miles traveled by approved school buses on approved to-and-from routes as they appear on the maps are measured. Two separate sets of measurements are required for each map:

1. The minutes and miles traveled with students on board.
2. The minutes and miles traveled in deadhead status.

BOTH sets of data are required for funding. Minutes are measured to the whole minute. Miles are measured to the tenth of a mile.

Step Four: A separate "Route Data" spreadsheet is prepared by the transportation director of the school district. Route minutes, miles, dead minutes, dead miles, route type, and other data are included. The spreadsheet is submitted with the route maps on November 1 each year. The annual budget is prepared using the data provided on this spreadsheet. Calculations are as shown in Steps Five through Thirteen.

Step Five: Calculate One-way Route Minutes. To calculate one-way route minutes, add "Minutes Expended Per Route" and "Dead Minutes Per Route" from the route map label. Multiply this sum by the annual number of days the route is run.

STEP 5: CALCULATE ONE-WAY ROUTE MINUTES

ROUTE	MINUTES EXPENDED PER ROUTE	PLUS	DEAD MINUTES PER ROUTE	MULTI- PLIED BY	NUMBER OF DAYS PER YEAR	EQUALS	ONE-WAY ROUTE MINUTES
6	90	+	76	X	183	=	30,378
6	85	+	50	X	183	=	24,705
8	35	+	50	X	183	=	15,555
9	175	+	65	X	183	=	43,920
11	50	+	20	X	175	=	12,250
12	95	+	30	X	183	=	22,875
16	24	+	96	X	183	=	21,960
21	58	+	30	X	183	=	16,104
TOTAL							187,747

Step Six: Calculate Inspection Minutes. Thirty minutes per day per bus is multiplied by the number of days buses are used on to-and-from routes during the year. The purpose of this computation is to compensate districts for thirty minutes of driver time per bus per day for bus cleaning and inspection. Note that this is NOT a per route computation, it is a per bus computation.

STEP 6: CALCULATE INSPECTION MINUTES

ROUTE NUMBER	BUS NUMBER	MULT I- PLIED BY	30 MINUTES PER ROUTE DAY	MULT I- PLIED BY	NUMBER OF DAYS PER YEAR	EQUALS	TOTAL INSPECTION MINUTES
6	73 (1)	X	30	X	183	=	5,490
6	73 (0)	X	30	X	183	=	0
8	73 (0)	X	30	X	183	=	0
9	57 (1)	X	30	X	183	=	5,490
11	57 (0)	X	30	X	175	=	0
12	57 (0)	X	30	X	183	=	0
16	48 (1)	X	30	X	183	=	5,490
21	48 (0)	X	30	X	183	=	0
TOTAL							16,470

Step Seven: Calculate Total Route Minutes. Since the sums of minutes calculated in Steps Five and Six are one way, route time for Type A routes must be doubled to get an accurate total. For Type A routes, multiply One-way Route Minutes from Step Five by 2, then add Inspection Minutes. This total is called "Total Route Minutes" for Type A routes. Sum all "Route Minutes" for Type B routes, then add Inspection Minutes. This total is called "Total Route Minutes" for Type B Routes. Add "Total Route Minutes" for Type A and Type B routes.

STEP 7: CALCULATE TOTAL ROUTE MINUTES

[illegible]

Step Eight: Calculate One-way Route Miles. To calculate One-way Route Miles, add "Miles Traveled Per Route" and "Dead Miles Per Route." Then, multiply this sum by the annual number of days the route is run.

STEP 8: CALCULATE ONE-WAY ROUTE MILES

TYPE A ROUTES	MILES TRAVELED PER ROUTE	PLUS	DEAD MILES PER ROUTE	MULTIPLIED BY	NUMBER OF DAYS PER YEAR	EQUALS	ONE-WAY ROUTE MILES
6	40.5	+	12.7	X	183	=	9,735.6
6	70.4	+	18.9	X	183	=	16,341.9
8	12.2	+	10.2	X	183	=	4,099.2
9	47.0	+	7.0	X	183	=	9,882.0
11	18.5	+	6.3	X	175	=	4,340.0
12	41.9	+	6.1	X	183	=	8,784.0
16	6.5	+	14.3	X	183	=	3,806.4
21	18.1	+	0.0	X	183	=	3,312.3
TOTAL							60,301.4

Step Nine: Calculate Total Route Miles. Since the miles calculated in Step Eight are one way, route mileage for Type A routes must be doubled to get an accurate total. For Type A routes, multiply One-way Route Miles from Step Eight by 2. This total is called "Total Route Miles" for Type A routes. Sum all "Route Miles" for Type B routes. This total is called "Total Route Miles" for Type B Routes. Add "Total Route Miles" for Type A and Type B routes. This sum is called "Total Route Miles" as in table below.

STEP 9: CALCULATE TOTAL ROUTE MILES

TYPE A ROUTES	ONE-WAY ROUTE MILES	MULTIPLIED BY	TWO	EQUALS	TOTAL ROUTE MILES
8	4,099.2	X	2	=	8,198.4
9	9,882.0	X	2	=	19,764.0
12	8,784.0	X	2	=	17,568.0
16	3,806.4	X	2	=	7,612.8
21	3,312.3	X	2	=	6,624.6
SUBTOTAL					59,767.8
TYPE B ROUTES					
6	9,735.6			=	9,735.6
6	16,341.9			=	16,341.9
11	4,340.0			=	4,340.0
SUBTOTAL					30,417.5
TOTAL ROUTE MILES, TYPE A AND TYPE B					90,185.3

Step Ten: Calculate Time Allowance. Multiply Total Minutes by the approved Time Allowance Rate. The approved rate for fiscal year 2005 is \$0.34 PER MINUTE.

STEP 10: CALCULATE TIME ALLOWANCE

ROUTE NUMBER	TOTAL ROUTE MINUTES	MULTIPLIED BY	TIME ALLOWANCE RATE	EQUALS	TIME ALLOWANCE
6	35,868	X	\$0.34	=	\$12,195
6	24,705	X	0.34	=	8,400
8	31,110	X	0.34	=	10,577
9	93,330	X	0.34	=	31,732
11	12,250	X	0.34	=	4,165
12	45,750	X	0.34	=	15,555
16	49,410	X	0.34	=	16,800
21	32,208	X	0.34	=	10,951
TOTAL	324,631				\$110,375

Step Eleven: Calculate Mileage Allowance. Multiply Total Miles by the approved Mileage Allowance Rate. The approved rate for fiscal year 2005 is \$0.32 PER MILE.

STEP 11: CALCULATE MILEAGE ALLOWANCE

ROUTE NUMBER	TOTAL ROUTE MILES	MULTIPLIED BY	MILEAGE ALLOWANCE RATE	EQUALS	MILEAGE ALLOWANCE
6	9,735.6	X	\$0. 32	=	\$3,115
6	16,341.9	X	0.32	=	5,229
8	8,198.4	X	0.32	=	2,624
9	19,764.0	X	0.32	=	6,720
11	4,340.0	X	0.32	=	13,888
12	17,568.0	X	0.32	=	5,622
16	7,612.8	X	0.32	=	2,436
21	6,624.6	X	0.32	=	2,120
TOTAL	90,185.3				\$28,859

Step Twelve: Administration and Equipment Allowance is a three-part computation.

Part 1. Part 1 involves three calculations: (1) Using the number of actual student riders per route, both regular and special education, multiply the total to the .6 exponential power, then multiply the result by \$500. (2) Calculate "Total Minutes" to the .6 exponential power then multiply by \$3.00. (3) Calculate the "Total Miles" to the .6 exponential power, then multiply by \$13.00. Sum the totals from each of these calculations. In the table on the following page, a hypothetical number of student riders has been inserted for each route. The miles that were used are total miles in **Step 10, above** and the minutes that were used are the total minutes used in **Step 11, above**.

Part 2. Multiply "Total Mileage" by the Equipment Allowance Rate of \$0.36 per mile.

Part 3. Sum the amounts calculated in Parts 1 and 2. This total is called the "Administration and Equipment Allowance."

STEP 12: CALCULATE ADMINISTRATION AND EQUIPMENT ALLOWANCE

PART 1: ADMINISTRATION ALLOWANCE

Pupil ridership statistics are used in the first calculation of the Administration Allowance. The calculation for Pupil Allowance uses the total number of students actually bused on all routes, NOT the number of **eligible** riders. It is not a factor in any other part of the formula. The first step in the administration allowance uses the total number of actual student riders of all routes.

Route Number	Number of Pupils Bused
6	84
6	78
8	67
9	80
11	75
12	72
16	68
21	79
Total	603

The following page shows the calculations necessary when determining the allowance for administrative costs such as salaries and benefits for district administrators and transportation office personnel.

Calculation #1:

Number of students actually bused to .6 power X \$500.

The total number of students bused is 603.

603 to the .6 power = 46.579024

46.579024 x \$500 = \$23,290

\$23,290 = Total allowance for pupils bused*

Calculation #2:

Number of minutes to .6 power X \$3.00.

The total minutes for the eight routes = 324,631.

324,631 to the .6 power = 2026.9078

2026.9078 x \$3.00 = \$6,081

\$6,081 = Total allowance for minutes*

Calculation #3:

Number of miles to .6 power X \$13.00

The total mileage for the eight routes = 90,185.3.

90,185.3 to the .6 power = 939.89957

939.89957 x \$13.00 = \$12,219

\$12,219 = Total allowance for mileage*

The allowances for each of the three calculations are added together to determine the total Administrative Allowance:

Pupil Allowance	Time Allowance	Mileage Allowance	Total Administration Allowance
\$23,290	\$6,081	\$12,219	\$41,589

PART 2: EQUIPMENT ALLOWANCE

ROUTE NUMBER	TOTAL ROUTE MILEAGE	MULTIPLIED BY	EQUIPMENT ALLOWANCE RATE	EQUALS	EQUIPMENT ALLOWANCE
6	9,735.6	X	\$0.39	=	\$3,797
6	16,341.9	X	0.39	=	6,373
8	8,198.4	X	0.39	=	3,197
9	19,764.0	X	0.39	=	7,708
11	4,340.0	X	0.39	=	1,693
12	17,568.0	X	0.39	=	6,852
16	7,612.8	X	0.39	=	2,969
21	6,624.6	X	0.39	=	2,584
SUBTOTAL					\$35,173

* Rounded to the dollar.

PART 3: COMBINE ADMINISTRATION AND EQUIPMENT ALLOWANCES

ADMINISTRATION ALLOWANCE	PLUS	EQUIPMENT ALLOWANCE	EQUALS	ADMINISTRATION AND EQUIPMENT ALLOWANCE
\$41,589	+	\$35,173	=	\$76,762

Step Thirteen: The amounts calculated in Steps Ten, Eleven, and Twelve are summed. This is the district's Schedule A Revenue.

STEP 13: CALCULATE TOTAL SCHEDULE A ALLOWANCE

TIME ALLOWANCE	\$110,375
+ MILEAGE ALLOWANCE	28,859
+ ADMINISTRATION AND EQUIPMENT ALLOWANCE	76,762
= TOTAL SCHEDULE "A "ALLOWANCE	\$215,996

C. Schedule B is a request for state reimbursement for miscellaneous, non-formula related expenses incurred in transporting eligible students to and from school or providing school-related subsistence to students. As part of the November 1 data submission, each district will complete the Schedule B request form, a copy of which is shown on the following page.

D. Proration: The *Utah Code*, at 53A-17a-126, requires that whenever the total allowance generated by the transportation finance formula under Schedule A, together with the total of Schedule B, exceeds the amount allocated by the Utah State Legislature, the allowance must be reduced prorata to equal the allocation.

**UTAH STATE OFFICE OF EDUCATION
PUPIL TRANSPORTATION
Miscellaneous Expenditure Report
Schedule B**

_____ School District hereby certifies that it shall expend or has expended funds in the below listed expenditure classifications and amounts in providing transportation for eligible students and requests reimbursement from the State of Utah.

_____ Signature of Superintendent

_____ Signature of Transportation Supervisor

_____ Date of Submission

DIRECTIONS: This report is submitted on November 1 with the Time and Mileage Report. It lists estimated Schedule B expenditures for the current school year. For cost codes 511, 512, and 513, enter the ANNUAL expenditure in the expenditure column. For cost codes 514, 515, and 516, enter the mileage in the mileage column and the estimated dollar amount in the expenditure column. Sum the amounts in the expenditure column at the bottom of the form.

ACCOUNTING CODE	EXPENDITURE DESCRIPTION	ANNUAL MILEAGE	ANNUAL EXPENDITURE
511	In-state tuition paid	N/A	\$
512	Out-of-state tuition paid	N/A	\$
513	Commercial non-contract (Taxi, UTA)	N/A	\$
514	Student Allowance (Payments to students in lieu of bus service). Attach names, addresses, and description of services.		\$
515	Subsistence (room and board and home visits). Attach names, addresses, and description of services.		\$
516	Payment of auto mileage in lieu of deadhead bus mileage.		\$
TOTAL CLAIM			\$